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10/567,175	02/03/2006	Paul Hubmer	AT03 0042 US1	9633

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EXAMINER

JOHNSON, SONJI N

ART UNIT	PAPER NUMBER
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2887

NOTIFICATION DATE	DELIVERY MODE
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12/01/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

Office Action Summary	Application No.	Applicant(s)	
	10/567,175	HUBMER ET AL.	
	Examiner	Art Unit	
	SONJI JOHNSON	2887	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>02/03/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

There are no headings within the specification.

Appropriate correction is required

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Objections

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2. Claims 7-12 are objected to because of the following informalities: The preamble of claims 7-12 are inconsistent.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prancz US Patent No. 6,170,880 in view of Rose US Patent No. 5,005,282, cited by applicant, further in view of Moll et al. US Patent No. 7,245,005 and further in view of Cipolla et al. US Patent No. 5,780,925.

Re claim 1, Prancz discloses a module (9, Figs. 1 and 2) with a chip (13, Figs 1 and 2) with chip connection contacts (14, 15, Figs 1 and 2) said module (9, Figs 1 and 2) being envisaged for use in a data carrier (1, Abstract) designed for contactless communication (Column 3, lines 28-33, Fig 4), that data carrier (1, Fig 1) containing the module (9, Figs. 1 and 2) with the chip (13, Figs 1 and 2) with chip connection contacts (14, 15, Figs 1 and 2) and additionally at least one further electrical component (16 and 17, Fig. 2) connected in an electrically conductive manner with the chip (13, Figs. 2 and 3 and Column 4, lines 1-23) with component connection contacts (23, 24, Fig 2, 3) wherein the electrically conductive connection between the chip (13, Figs 1 and 2) and the at least one further component (25, Figs 2, 3) can be realized in accordance with

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two opposed polarities, and wherein the module (9, Figs. 1 and 2) has a chip (13, Figs. 2 and 3 and Column 4, lines 1-23) with at least two pairs of chip connection contacts (14, 15, Figs 1 and 2) (Column 4, lines 1-23).

Prancz fails to disclose a module having a midpoint, two pairs of module connecting plates wherein the two module connecting plates of each pair are provided for the electrically conductive connection with the component connection contacts of in each case one of at least two further components, and wherein each module connecting plate has a plate surface with a particular shape and is designed to be electrically conductive and is connected in an electrically conductive manner with a chip connection contact, and wherein the shapes of the plate surfaces of the two module connecting plates of each pair are identical, and wherein the shapes of the plate surfaces of the module connecting plates of different pairs are different, and wherein in a starting position of the module connecting plates, the shapes of the plate surfaces of the module connecting result in a particular plate pattern and differ such that when, starting from the starting position, all the module connecting plates are jointly rotated around an axis that runs perpendicular in relation to the plate surfaces and that passes through the midpoint the same plate pattern always results after joint rotation around 180° in each case.

However Rose discloses a module (70, Fig 4, Column 4, lines 43-44) having a midpoint (36, Figs 1, 4) and wherein the shapes of the plate surfaces of the two connecting plates of each pair are identical (Column 2, lines 51-53, wherein the patterns are identical), and wherein the shapes of the plates surfaces of the connecting plates different pairs are different, (Column 2, lines 51-65, Figs 1 and 2) and wherein in

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a starting position the shapes of the plates surfaces of the connecting plates result in a particular plate pattern (Figs 1 and 2) and differ such that when, starting from the starting position, all the connecting plates are jointly rotated around an axis that runs perpendicular in relation to the plate surfaces and that passes through the mid-point the same plate pattern always results (Figs 1-3).

Given the teachings of Rose, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the module of Prancz with a module having a midpoint and wherein the shapes of the plate surfaces of each pair are identical and wherein the shapes of the plate surfaces of the module of different pairs are different and wherein in a starting position the shapes of the plate surfaces of the module connecting result in a particular plate pattern and differ such that when, starting from the starting position, all the module connecting plates are jointly rotated around an axis that runs perpendicular in relation to the plate surfaces and that passes through the mid-point the same plate pattern always results.

Doing so would provide a module with a lead frame i.e. patterns which facilitates installation of the electronic module in the card body (Column 1, lines 39-44 and Column 2, lines 59-60).

Prancz as modified by Rose, discloses all of the claimed limitations from above except that the plate surface is of a module connecting plate, wherein the two module connecting plates of each pair are provided for the electrically conductive connection with the component connection contacts of in each case one of at least two further components, and wherein each module connecting plate has a plate surface with a

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particular shape and is designed to be electrically conductive and is connected in an electrically conductive manner with a chip connection contact and wherein the same plate pattern always results after joint rotation around 180° in each case.

However, Moll discloses two pairs of a module connecting plate (12, 13, Figs 1 and 2, Column 4, lines 11-13) wherein the two module connecting plates (12, 13, Figs 1 and 2) of each pair are provided for the electrically conductive connection with the component connection contacts (47, 48, Fig 2) of in each case one of at least two further components (28-33) , and wherein each module connecting plate (12, 13, Fig 1) has a plate surface with a particular shape (Figs 1-3) and is designed to be electrically conductive and is connected in an electrically conductive manner with a chip connection contact (47, 48 Fig 2) (Column 3, line 54-Column 4 line51).

Given the teachings of Moll, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the module of Prancz as modified by Rose with two pairs of a module connecting plate wherein the two module connecting plates of each pair are provided for the electrically conductive connection with the component connection contacts of in each case one of at least two further components, and wherein each module connecting plate has a plate surface with a particular shape and is designed to be electrically conductive and is connected in an electrically conductive manner with a chip connection contact

Doing so would provide a module with a compact and space saving design (Column 2, lines 39-45)

Prancz as modified by Rose as modified by Moll, discloses all of the claimed limitations from above except the same plate pattern always results after joint rotation around 180° in each case.

However, Cipolla discloses wherein the same plate pattern always results after joint rotation around 180° in each case (Abstract, wherein the chips are identical and rotated around 180°)

Given the teachings of the Cipolla, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the module of Prancz as modified by Rose and Moll with wherein the same plate pattern always results after joint rotation around 180° in each case

Doing so would provide a new and improved electronic device packaging structure for packaging integrated circuit chips (Column 2, lines 13-15)

Re claim 2, Prancz , Rose, Moll and Cipolla discloses a module as claimed in claim 1, and Rose discloses wherein the module has a main axis running through the mid-point (labeled 36, Fig 1), and wherein of each pair of connecting plates (20, 26, 28, 34, Fig 1), one connecting plate (34, 28, Fig 1) points in a first direction (Fig 1, wherein the first direction is and upward direction) that runs parallel to the main axis and points away from the mid-point (36, Fig 1), and the other connecting plate (20, 26, Fig 1) points in a second direction (Fig 1, wherein the second direction is a downward direction) that runs parallel to the main axis and runs opposite to the first direction and points away from the mid-point (36, Fig 1) and wherein the connecting plates (20, 26, 28 34, Fig 1) that point in the first direction (upward direction) lie next to one another and

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are separated from one another by a separation zone (Fig 1 wherein the separation zone comprises of the slop 12 that separate the patterns A, B, and C)in each case, and wherein the connecting plates (20, 26, 28, 34, Fig 1) that point in the second direction (downward direction) lie next to one another and are separated from one another by a separation zone (12, fig 1) in each case, and wherein the shapes of the plate surfaces of two connecting plates (20, 26, 28, 34, Fig 1) lying next to one another are different (Fig 1, wherein the slot 12 separates the connecting plates wherein the slots 12 are of a different shape and thus constitutes different plate). Moll further discloses that the connecting plates are module connecting plates (12, 13, Fig 1, Column 4, lines 11-13).

Re claim 3, Prancz , Rose, Moll and Cipolla discloses a module as claimed in claim 2, and Rose further discloses wherein the shapes of the plate surfaces of two connecting plates (20, 26, 28, 34, Fig 1) lying next to one another are different as a consequence of the characteristics of the separation zone that separates these two connecting plates (Fig 1 wherein the separation zone comprises of the slop 12 that separate the patterns A, B, and C or of different shapes and the two connecting plates or different). Moll further discloses that the connecting plates are module connecting plates (12, 13, Fig 1, Column 4, lines 11-13).

Re claim 4, Prancz , Rose, Moll and Cipolla discloses a module as claimed in claim 3, and Rose discloses wherein at least one separation zone (12, Fig 1) lying between two connecting plates (20, 26, 28, 34, Fig 1) that lie next to one another runs obliquely to the main direction (Fig 1). Moll further discloses that the connecting plates are module connecting plates (12, 13, Fig 1, Column 4, lines 11-13).

Re claim 5, Prancz , Rose, Moll and Cipolla discloses a module as claimed in claim 4, and Rose further discloses wherein the separation zone (12, Fig 1) runs in a straight line (Fig 1).

Re claim 6, Prancz , Rose, Moll and Cipolla discloses a module as claimed in claim 1, and Rose further discloses wherein the connecting plates (20, 26, 28, 34, Fig 1) have been produced with the aid of a conductor frame configuration (Column 1, lines 66-68). Moll further discloses wherein the connecting plates are module connecting plates (12, 13, Fig 1, Column 4, lines 11-13).

Re claim 7, Prancz , Rose, Moll and Cipolla discloses a data carrier that is designed for contactless communication and contains a module with a chip, with chip connection contacts and additionally at least one further electrical component connected in an electrically conductive manner with the chip with component connection contacts and wherein the module is designed as claimed in claim 1, and Moll further discloses wherein the module connecting plates (12, 13, Figs 1 and 2, Column 4, lines 11-13)-of each pair of module connecting plates (12, 13, Figs 1 and 2, Column 4, lines 11-13) is connected with the component connection contacts (47, 48, Fig 2) of in each case one of at least two further components (28-33, Fig 2).

Re claim 8, Prancz , Rose, Moll and Cipolla discloses a lead frame configuration which is provided for the production of a module as claimed in claim 1 and Rose discloses a module having a midpoint (36, Figs 1, 4) wherein the lead frame configuration (A, Fig 1) has at least two pairs of connecting plates (20, 26, 28, 34, Fig 1) and wherein the shape of the plate surfaces of the two connecting plates of each pair

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are identical (Column 2, lines 51-53, wherein the patterns are identical), and wherein the shapes of the plate surfaces of the module of different pairs are different (Column 2, lines 51-65, Figs 1 and 2) and wherein in a starting position of the connecting plates, the shapes of the plate surfaces of the connecting plate yield a particular plate pattern (Figs 1 and 2) and differ such that, starting from the starting position, wherein all the connecting plates are jointly rotated around an axis that runs perpendicular in relation to the plate surfaces and that passes through the mid-point the same plate pattern always results (Figs 1-3).

Moll discloses that the connecting plates are module connecting plate wherein two pairs of a module connecting plate (12, 13, Figs 1 and 2, Column 4, lines 11-13) wherein the two module connecting plates (12, 13, Figs 1 and 2) of each pair are provided for the electrically conductive connection with the component connection contacts (47, 48, Fig 2) of in each case one of at least two further components (28-33, Fig 2) , and wherein each module connecting plate (12, 13, Figs 1 and 2) has a plate surface with a particular shape (Figs 1-3) and is designed to be electrically conductive and is connected in an electrically conductive manner with a chip connection contact (47, 48, Fig 2) (Column 3, line 54-Column 4 line 51) and Cipolla further discloses the same plate pattern always results after joint rotation around 180° in each case.

Re claim 9, Prancz , Rose, Moll and Cipolla discloses a lead frame configuration as claimed in claim 8 and Rose further discloses , wherein the lead frame configuration has a main axis that passes through the mid-point (labeled 36) (Fig 1) and wherein of each pair -of connecting plates (20, 26, 28, 34, Fig 1), one connecting

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plate (34, 28, Fig 1) points in a first direction (Figs 1, wherein the first direction is and upward direction) that runs parallel to the main axis and points away from the mid-point (36), and the other connecting plate (20, 26, Fig 1) points in a second direction (Fig 1, wherein the second direction is a downward direction) that runs parallel to the main axis and runs opposite to the first direction and points away from the mid-point (36, Fig 1) and wherein the connecting plates (20, 26, 28 34) that point in the first direction (upward direction) lie next to one another and are separated from one another by a separation zone (Fig 1 wherein the separation zone comprises of the slop 12 that separate the patterns A, B, and C)in each case, and wherein the connecting plates (20, 26, 28, 34, Fig 1) that point in the second direction (downward direction) lie next to one another and are separated from one another by a separation zone (12) in each case, and wherein the shapes of the plate surfaces of two connecting plates (20, 26, 28, 34, Fig 1) lying next to one another are different (Fig 1, wherein the slot 12 separates the connecting plates wherein the slots 12 are of a different shape and thus constitutes different connecting plate). Moll further discloses that the connecting plates are module connecting plates (12, 13, Fig 1, Column 4, lines 11-13).

Re claim 10, Prancz , Rose, Moll and Cipolla discloses a lead frame configuration as claimed in claim 9, and Rose further discloses wherein the shapes of the plate surfaces of two connecting plates (20, 26, 28, 34, Fig 1) lie next to one another are different as a consequence of the characteristics of the separation zone (Fig 1 wherein the separation zone comprises of the slop 12 that separate the patterns A, B, and C or of different shapes and the constituting connecting plates that are

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different) that separates these two connecting plates. Moll further discloses that the connecting plates are module connecting plates (12, 13, Fig 1, Column 4, lines 11-13).

Re claim 11, Prancz , Rose, Moll and Cipolla discloses a lead frame configuration as claimed in claim 10, and Rose further discloses wherein at least one separation zone (12, Fig 1) lying between two connecting plates (20, 26, 28, 34) that lie next to one another runs obliquely to the main direction (Fig 1). Moll further discloses that the connecting plates are module connecting plates (12, 13, Fig 1, Column 4, lines 11-13).

Re claim 12, Prancz , Rose, Moll and Cipolla discloses, a conductor frame configuration as claimed in claim 11, and Rose further discloses wherein the separation zone (12, Fig 1) runs in a straight line (Fig 1).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SONJI JOHNSON whose telephone number is 571-270-5266. The examiner can normally be reached on Monday-Thursday 7:30 AM -6:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve S. Paik can be reached on 571-272-2404. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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